e r 0

5

10

15

20

## POWER TAKE OFF CONTROL SYSTEM

## Abstract Of The Disclosure

A control system and method for detecting variable load types and controlling the operation of a PTO clutch to effect engagement of the clutch with variable loads, and especially to more optimally effect the engagement of a clutch with a heavy load is disclosed. The control system includes a controller that receives input and output clutch shaft speed signals and generates control signals to control the pressure applied by the clutch. When heavier loads are applied to the PTO shaft, during the time when control signals are being generated before detection of initial movement of the output shaft, the controller generates one or more shock signals of short duration to cause momentary applications of significantly greater pressure to the clutch in order to break loose the applied load. Based upon the time of detection of initial movement by the output shaft, load categorization can be made, and control signals that are thereafter generated before lockup may be dependent, in part, upon the determined load categorization.